

# AcaraKita: Integrated Digital Platform for Event Organizer Services in Indonesia

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## ABSTRACT

This study examines the development and implementation of AcaraKita, a web- and mobile-based digital platform designed to modernize event organizer (EO) services in Indonesia. The system integrates three primary actors—Admin, Admin EO, and Customer—each with distinct yet complementary roles involving vendor management, booking, verification, status tracking, and service reviews. The development process applied the *Waterfall* model, consisting of requirement analysis, design, implementation, testing, deployment, and maintenance, combined with IT governance evaluation using the COBIT 5 framework to ensure alignment with business objectives. Testing results indicated that all core features operated effectively, with an average response time of less than one second and a user satisfaction score of 4.139 on the Likert scale. The IT governance risk analysis highlighted the need for improvements in documentation, security, and business continuity planning. While the system demonstrates a solid foundation, further enhancements are necessary, including social media API integration, vendor recommendation systems, and analytics dashboards to support decision-making. Overall, AcaraKita strengthens EO digitalization, improves operational efficiency, and fosters service transparency in a sustainable manner.

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## 1. Introduction

Event planning remains a significant activity in Indonesia, encompassing a wide range of occasions such as weddings, birthdays, seminars, and corporate gatherings. Despite the strong demand, many clients encounter difficulties in finding event organizers (EOs) that align with their budgets, locations, and specific needs. Conversely, EOs often struggle to expand their market reach due to limited promotional strategies and the underutilization of digital platforms. These challenges highlight the necessity of a system that can bridge the gap between service providers and customers by offering efficient and transparent interactions. To address this issue, AcaraKita was developed as a web- and mobile-based platform that integrates EOs and event vendors into a centralized digital ecosystem. The platform supports both Business-to-Business (B2B) and Business-to-Customer (B2C) models, enabling it to accommodate diverse user needs across individual and organizational contexts. Its key features include vendor registration, real-time order tracking, digital payment integration, service reviews, and vendor profile management, all of which aim to modernize the event management process in Indonesia. From a technical perspective, AcaraKita employs

the Waterfall development methodology, which is particularly suitable for projects with clearly defined requirements, as it provides structured phases of analysis, design, implementation, testing, deployment, and maintenance (Pressman & Maxim, 2014; Wibowo & Susanto, 2020). This linear model ensures systematic documentation and facilitates quality assurance throughout the development lifecycle (Sommerville, 2011). To strengthen system analysis and ensure compatibility with user needs, structured approaches to systems design and modeling were adopted (Dennis, Wixom, & Roth, 2018). Furthermore, AcaraKita incorporates IT governance evaluation based on the COBIT 5 framework, which provides a robust guideline for aligning IT services with business objectives, ensuring value delivery, and mitigating governance-related risks (ISACA, 2012; Yusuf & Hendrayudi, 2022). The adoption of COBIT 5 supports the establishment of a maturity model for the system's governance, highlighting areas of strength and those requiring improvement.

In addition, AcaraKita integrates a secure payment gateway to support financial transactions, which plays a crucial role in fostering user trust and operational efficiency. The use of platforms such as Midtrans provides a reliable mechanism for handling payments and enhances the overall user experience by ensuring transaction accuracy and security (Midtrans, 2024). Beyond functionality, the system aims to promote digital transformation among local EOs, particularly small and medium-sized enterprises (SMEs), by offering tools that not only enhance visibility but also streamline client engagement and service delivery. Similar approaches in digital business ecosystems have demonstrated their effectiveness in increasing competitiveness and scalability for SMEs (Laudon & Laudon, 2022; Chaffey & Ellis-Chadwick, 2019). Overall, the development of AcaraKita reflects the convergence of software engineering principles, IT governance practices, and digital business strategies. By addressing persistent inefficiencies in the event management sector, the platform demonstrates how structured development methods, combined with governance frameworks and digital payment technologies, can be applied to build systems that are not only functional but also sustainable in the long term. As digital adoption continues to reshape service industries in Indonesia, platforms such as AcaraKita have the potential to redefine how clients and service providers interact, setting a precedent for innovation in similar sectors.

## 2. Methodology

This study applies the Waterfall software development methodology, a linear and sequential approach well-suited for projects with clearly defined requirements from the outset. The model emphasizes step-by-step execution, beginning with requirements analysis, followed by system design, implementation, testing, deployment, and maintenance. In the requirements analysis stage, the team identified essential features needed by different user groups—including customers, event organizers (EOs), vendors, and administrators—such as user authentication, service catalog, order processing, payment integration, online chat, review mechanisms, and real-time status tracking. The design phase involved constructing the system architecture, database schema, and user interface to ensure consistent performance across devices. During implementation, coding focused on core modules such as login, service management, and payment transactions. The testing phase then validated the functionality, security, and performance of the system. Once verified, the system was deployed on a server for real-world access, followed by maintenance activities to address bugs, improve performance, and adapt features in response to user feedback. This structured approach ensures that the development process is both well-documented and accountable for its quality (ISACA, 2012).

The technical environment was designed to balance stability, flexibility, and compatibility. Development employed Visual Studio Code as the primary editor, supported by XAMPP and Laragon for local server management. The system operated on Windows 11, using MySQL as the database engine and PHP as the core programming language. These technologies were selected for their availability, community support, and scalability, making them appropriate for medium-scale web applications. To enable financial transactions, the platform was integrated with the Midtrans payment gateway, which offers secure and structured transaction handling. According to its documentation (Midtrans, 2024), the gateway ensures accuracy and reliability in processing payments, thereby strengthening user trust and operational efficiency.

Beyond technical development, attention was also given to governance aspects. The COBIT 5 framework was adopted as a reference for IT governance evaluation, ensuring that the platform aligns with organizational objectives, delivers measurable value, and mitigates risks across its lifecycle (ISACA, 2012). Embedding governance principles early in the development process reflects best practices highlighted in prior studies, which stress the importance of managing not only the technical success of a system but also its managerial reliability, security, and long-term sustainability. Consequently, the methodology applied in the development of AcaraKita represents a combination of structured engineering practices, technological integration, and governance-oriented evaluation, ensuring that the platform is not only functional but also strategically resilient.

### 3. Results and Case Study

The development of AcaraKita demonstrates the successful implementation of a web- and mobile-based digital platform supporting Event Organizer (EO) services in Indonesia. The system involves three primary actors—Admin, Admin EO, and Customer—each with distinct but complementary roles. The Admin manages user data, verifies vendors, moderates reviews, and monitors reports; the Admin EO focuses on operational responsibilities such as managing vendor catalogs, verifying orders, and confirming service completion; while Customers can register accounts, order services, choose payment methods, track order statuses in real time, and provide service reviews. These differentiated responsibilities are visualized through workflows and use case diagrams, which facilitate a clearer understanding of actor–system interactions. This approach aligns with the principles of the *Unified Modeling Language (UML)* in describing actor-based system requirements and functional modeling (Booch, Rumbaugh, & Jacobson, 1999; Fowler, 2004). Additionally, the inclusion of real-time tracking features reflects findings in prior studies highlighting the role of digital platforms in enhancing customer experience and trust (Liu, Wang, & Xu, 2021).

The development of AcaraKita demonstrates the successful implementation of a web- and mobile-based digital platform designed to support Event Organizer (EO) services in Indonesia, involving three main actors—Admin, Admin EO, and Customer—each with distinct but complementary responsibilities within the service ecosystem. The Admin has full authority to manage user data, verify vendors, moderate reviews, and monitor reports; the Admin EO is responsible for the operational side of service provision, including managing vendor catalogs, reviewing orders, approving or rejecting requests, and confirming service completion; while Customers, as end-users, are able to register accounts, browse vendors, place service orders, select payment methods, track their orders in real time, and provide reviews once services are completed. These differentiated roles highlight a clear division of responsibilities: customers focus primarily on using services, Admin EO handles vendor management and transactional processes, and the Admin oversees governance and overall system monitoring. The

distinction is further visualized through workflows.



Figure 1. Workflow Customer



Figure 2. Workflow Admin

Figure 1 illustrates the customer flow from service ordering to status tracking and feedback submission, Figure 2 depicts the Admin’s role in monitoring activities and moderating data.



Figure 3. Admin EO’s

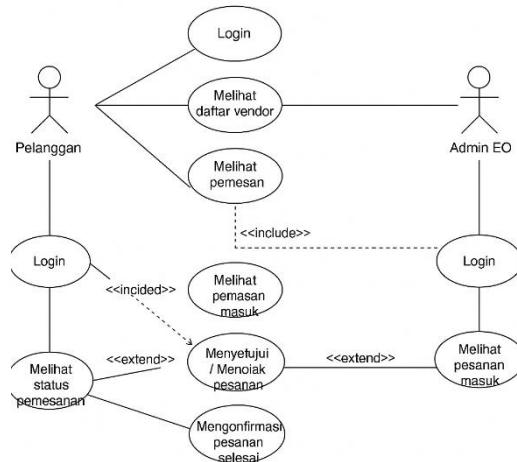


Figure 4. Use Case Diagram

Figure 3 presents the Admin EO’s workflow in managing vendors, processing requests, and marking services as completed. Furthermore, Figure 4, the *Use Case Diagram*, illustrates actor–system interactions, showing that customers have access to login, vendor browsing, ordering, tracking, and reviewing features, while the Admin EO has additional authority to process, approve, or reject requests, and confirm service completion. With structured workflows and use case diagrams, AcaraKita successfully accommodates the needs of different user roles, supports the digitalization of EO services, and establishes business processes that are more efficient, transparent, and accountable.

#### 4. Discussion

The implementation of AcaraKita underscores the significance of digitalization in the EO service sector by improving operational efficiency, transparency, and user

satisfaction through the integration of B2C and B2B models. IT governance assessment based on COBIT 5 revealed a reasonably mature governance structure, with an average score of 4.139, though risks remain in documentation, access control, and business continuity planning. These findings are consistent with *ISO/IEC 27005* guidelines, which emphasize structured documentation and layered risk management (ISO, 2018). Furthermore, research on digital governance in SMEs highlights the importance of platform-based systems in improving competitiveness and long-term sustainability (Carillo, Galy, & Guthrie, 2021). To address identified gaps, strategic development plans include strengthening system security through multi-factor authentication and role-based access control, integrating social media APIs for broader outreach, and embedding analytics dashboards and vendor recommendation systems. Such measures ensure that AcaraKita not only operates efficiently but also maintains resilience and adaptability to evolving user needs.

The implementation of AcaraKita highlights the significance of digitalization in the event organizer (EO) service sector by improving operational efficiency, service transparency, and user satisfaction through the integration of all roles into a single platform. The platform's key strength lies in its ability to accommodate both Business-to-Customer (B2C) and Business-to-Business (B2B) models, making it suitable for personal as well as corporate needs, while features such as vendor management, review systems, and real-time tracking enhance trust and accountability. The IT governance assessment was conducted using a COBIT 5-based questionnaire focusing on the *Value Delivery* domain, which identified several risks that could hinder strategic objectives, including the absence of a comprehensive Business Continuity Plan, the lack of periodic IT performance evaluation, unstructured access authorization controls, and limited documentation of systems and business processes. Respondent evaluations showed scores ranging from 3.694 to 4.472, with an average of 4.139, indicating that the governance maturity level is generally sound but still requires improvement in documentation, operational efficiency, and long-term technical planning, as summarized in Table 1.

Table 1. IT Governance Assessment Results for AcaraKita.

No	Respondent	Score	Evaluation Summary
1	Bu Intan	3.694	The system is on the right track but requires better staff understanding and improved operational efficiency.
2	Nanda Wido Prasojo	4.472	Most COBIT indicators are fulfilled, with effective digital service management.
3	Fu'ad Na'im Nurfattah	4.000	IT processes and objectives are fairly aligned but require stronger strategic and technical planning.
4	Bukhori Debrillianda Tegar	4.389	The system is stable and structured, though risk documentation and reporting need further enhancement.
5	Haidar Rahman	3.972	COBIT principles are applied adequately, but formal documentation and internal communication need improvement.

The average score of 4.139 reflects a solid governance foundation, suggesting that the system is ready for expansion, though improvements remain necessary in documentation, strategic planning, and operational efficiency. Beyond governance, several technical limitations were identified, such as system testing being limited to internal users, which does not represent performance across diverse backgrounds and locations, the absence of supporting features such as social media integration,

automated notifications, and vendor recommendation mechanisms, and security mechanisms that remain basic as they do not yet include two-factor authentication or role-based access control. To address these challenges, development strategies have been planned, including the implementation of multi-factor authentication and role-based access control to strengthen security, integration of social media APIs to expand promotional reach, the development of analytics dashboards and vendor recommendation systems based on user transaction history for greater responsiveness, and large-scale testing involving EO communities across different regions. With these improvements, AcaraKita is expected not only to serve as a vendor search platform but also to evolve into a digital event management solution that is adaptive, secure, and sustainable, aligned with IT governance best practices.

## 5. Conclusion

The implementation of AcaraKita has successfully modernized EO service management in Indonesia by replacing manual processes with an integrated digital platform. Core functionalities performed effectively, with average response times under one second and a user satisfaction score of 4.139 on the Likert scale. However, further enhancements remain necessary in areas of security, documentation, and advanced features such as vendor recommendations and analytics. These findings align with studies on IT governance maturity models, which stress that digital platforms can achieve long-term sustainability when governance practices evolve alongside system growth (De Haes, Van Grembergen, & Debreceny, 2013). With continuous improvement and expansion, AcaraKita has the potential to evolve into a secure, adaptive, and sustainable digital event management solution.

Based on the findings of this study, the implementation of AcaraKita has successfully modernized the process of ordering and managing event organizer (EO) services that were previously conducted manually, by integrating key features such as vendor management, event booking, verification by Admin EO, and real-time order tracking. All core system functionalities operated effectively, with an average response time of less than one second and no functional errors detected during testing, while user evaluations using the Likert scale produced an average score of 4.139, indicating a high level of satisfaction with both usability and system functionality. Nevertheless, further development is required, including the integration of social media APIs to support promotion, vendor recommendation systems based on user history, and an analytics dashboard to assist decision-making. From an IT governance perspective, improvements in security, documentation, and business continuity planning are also necessary to ensure that the platform is well-prepared to handle future growth and increasing complexity, thereby enhancing its sustainability and reliability in the long term.

## References

- Booch, G., Rumbaugh, J., & Jacobson, I. (1999). *The unified modeling language user guide*. Addison-Wesley.
- Carillo, K. D. A., Galy, N., & Guthrie, C. (2021). Digital transformation and SME performance: A resource-based view. *Journal of Small Business Management*, 59(1), 1–23. <https://doi.org/10.1080/00472778.2020.1844499>
- Chaffey, D., & Ellis-Chadwick, F. (2019). *Digital marketing*. Pearson.

- Dennis, A., Wixom, B. H., & Roth, R. M. (2018). *Systems analysis and design*. Wiley.
- De Haes, S., Van Grembergen, W., & Debreceeny, R. (2013). COBIT 5 and enterprise governance of information technology: Building blocks and research opportunities. *Journal of Information Systems*, 27(1), 307–324. <https://doi.org/10.2308/isisys-50422>
- Fowler, M. (2004). *UML distilled: A brief guide to the standard object modeling language*. Addison-Wesley.
- ISACA. (2012). *COBIT 5: A business framework for the governance and management of enterprise IT*. ISACA.
- ISO. (2018). *ISO/IEC 27005:2018 Information technology—Security techniques—Information security risk management*. International Organization for Standardization.
- Laudon, K. C., & Laudon, J. P. (2022). *Management information systems: Managing the digital firm*. Pearson.
- Liu, C., Wang, Q., & Xu, Y. (2021). Real-time tracking and customer experience in digital platforms. *Electronic Commerce Research and Applications*, 46, 101035. <https://doi.org/10.1016/j.elerap.2021.101035>
- Midtrans. (2024). *Dokumentasi Midtrans – Integrasi payment gateway*. <https://docs.midtrans.com>
- Pressman, R. S., & Maxim, B. R. (2014). *Software engineering: A practitioner's approach*. McGraw-Hill Education.
- Sommerville, I. (2011). *Software engineering*. Addison-Wesley.
- Wibowo, A., & Susanto, H. (2020). Analisis pengembangan aplikasi layanan berbasis web dengan metode waterfall. *Jurnal Teknik Informatika dan Sistem Informasi*, 6(1), 45–52.
- Yusuf, M., & Hendrayudi. (2022). Evaluasi tata kelola teknologi informasi menggunakan framework COBIT 5 pada sistem informasi akademik. *Jurnal Teknologi dan Sistem Informasi*, 5(2), 123–131.